West Virginia Department of Environmental Protection Jim Justice Austin Cap

Governor

Division of Air Quality

Austin Caperton Cabinet Secretary

Permit to Modify



R13-3249A

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§22-5-1 et seq.) and 45 C.S.R. 13 – Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation. The permittee identified at the above-referenced facility is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Issued to:

Dominion Transmission, Inc. Hastings Compressor Station 103-00006

> William F. Durham Director

> > Issued: DRAFT

This permit will supersede and replace Permit R13-3249B.

Facility Location: Shortline Highway off State Route 20

Pine Grove, Wetzel County, West Virginia

Mailing Address: 925 White Oaks Blvd.

Bridgeport, WV 26330

Facility Description: Production Gas and Transmission Gas Compression Station

NAICS Codes: 486210

UTM Coordinates: 528.64 km Easting • 4377.66 km Northing • Zone 17

Permit Type: Modification

Description of Change: This action is for replacement of the two existing compressor engines. This change will

result in a decrease in oxides of nitrogen emissions in accordance with 45 CSR 14 that

will be applied under Permit Application R14-0033.

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §§22-5-14.

The source is subject to 45CSR30. Changes authorized by this permit must also be incorporated into the facility's Title V operating permit. Commencement of the operations authorized by this permit shall be determined by the appropriate timing limitations associated with Title V permit revisions per 45CSR30.

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1.0. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
EN04	EN04	Reciprocating Engine configured with compressor Spark Ignited (SI), 2-stoke lean burn (2SLB) Ajax DPC-2803 LE	2019	542 bhp	Oxidation Catalyst
EN05	EN05	Reciprocating Engine configured with compressor SI, 2SLB Ajax DPC-2802 LE	2019	347 bhp	Oxidation Catalyst
RBR02	RBR02	Reboiler (0.55 MMBtu/hr) for glycol regenerator	2015	0.55 MMBtu/hr	None
DEHY01	DEHY01	TEG Dehydration Unit with flash tank	2015	7.5 MMscf/day	DEHY1
DEHY1	DEHY1	Enclosed Combustion Device – Questor Q50	2015	2 MMBtu/hr	N/A
AUX06	AUX06	Generac Model QT080 Natural Gas-Fired Emergency Generator EPA Cert# CGNXB06.82NN-012	2012	128 hp	None

2.0. General Conditions

2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.2. Acronyms

CAAA	Clean Air Act Amendments	NOx	Nitrogen Oxides
CBI	Confidential Business	NSPS	New Source Performance
	Information		Standards
CEM	Continuous Emission Monitor	PM	Particulate Matter
CES	Certified Emission Statement	$PM_{2.5}$	Particulate Matter less than 2.5
C.F.R. or CFR	Code of Federal Regulations		μm in diameter
CO	Carbon Monoxide	PM_{10}	Particulate Matter less than
C.S.R. or CSR	Codes of State Rules		10μm in diameter
DAQ	Division of Air Quality	Ppb	Pounds per Batch
DEP	Department of Environmental	Pph	Pounds per Hour
	Protection	Ppm	Parts per Million
dscm	Dry Standard Cubic Meter	Ppmy or	Parts per Million by Volume
FOIA	Freedom of Information Act	ppmv	
HAP	Hazardous Air Pollutant	PSD	Prevention of Significant
HON	Hazardous Organic NESHAP		Deterioration
HP	Horsepower	Psi	Pounds per Square Inch
lbs/hr	Pounds per Hour	SIC	Standard Industrial
LDAR	Leak Detection and Repair		Classification
M	Thousand	SIP	State Implementation Plan
MACT	Maximum Achievable	SO_2	Sulfur Dioxide
1,21202	Control Technology	TAP	Toxic Air Pollutant
MDHI	Maximum Design Heat Input	TPY	Tons per Year
MM	Million	TRS	Total Reduced Sulfur
MMBtu/hr or	Million British Thermal Units	TSP	Total Suspended Particulate
mmbtu/hr	per Hour	USEPA	United States Environmental
MMCF/hr or	Million Cubic Feet per Hour	COLLII	Protection Agency
mmcf/hr		UTM	Universal Transverse Mercator
NA	Not Applicable	VEE	Visual Emissions Evaluation
NAAQS	National Ambient Air Quality	VOC	Volatile Organic Compounds
- :	Standards	VOL	Volatile Organic Liquids
NESHAPS	National Emissions Standards for Hazardous Air Pollutants	VOL	

2.3. Authority

This permit is issued in accordance with West Virginia Air Pollution Control Act W.Va. Code §§ 22-5-1. et seq. and the following Legislative Rules promulgated thereunder:

2.3.1. 45CSR13 – Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation;

2.4. Term and Renewal

2.4.1. This permit supersedes and replaces previously issued Permit R13-3249B. This Permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any other applicable legislative rule;

2.5. Duty to Comply

2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-3249, R13-3249A, R13-3249B, and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to:

[45CSR§§13-5.11 and 10.3.]

- 2.5.2. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA;
- 2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;
- 2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses, and/or approvals from other agencies; i.e., local, state, and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

2.6. Duty to Provide Information

The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for administratively updating, modifying, revoking, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

2.7. Duty to Supplement and Correct Information

Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

2.8. Administrative Update

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13.

[45CSR§13-4.]

2.9. Permit Modification

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13.

[45CSR§13-5.4.]

2.10 Major Permit Modification

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.

[45CSR§13-5.1]

2.11. Inspection and Entry

The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

2.12. Emergency

2.12.1. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable

- or operator error.
- 2.12.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Section 2.12.3 are met.
- 2.12.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
 - d. The permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- 2.12.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- 2.12.5 The provisions of this section are in addition to any emergency or upset provision contained in any applicable requirement.

2.13. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it should have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

2.14. Suspension of Activities

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

2.15. Property Rights

This permit does not convey any property rights of any sort or any exclusive privilege.

2.16. Severability

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

2.17. Transferability

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13. **[45CSR§13-10.1.]**

2.18. Notification Requirements

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

2.19. Credible Evidence

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

- 3.1.1. Open burning. The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
 [45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible. **[45CSR§6-3.2.]**
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management, and the Bureau for Public Health Environmental Health require a copy of this notice to be sent to them.

[40CFR§61.145(b) and 45CSR§34]

- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public. [45CSR§4-3.1] [State Enforceable Only]
- 3.1.5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown. **[45CSR§13-10.5.]**
- 3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.

 [45CSR\$11-5.2.]

3.2. Monitoring Requirements

[Reserved]

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary

exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.
- b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.
- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
- d. The permittee shall submit a report of the results of the stack test within sixty (60) days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1.; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
 - 1. The permit or rule evaluated, with the citation number and language;
 - 2. The result of the test for each permit or rule condition; and,
 - 3. A statement of compliance or noncompliance with each permit or rule condition.

[WV Code § 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports, and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support

information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on

3.4.2. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§4. State Enforceable Only.]

3.5. Reporting Requirements

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- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- 3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
- 3.5.3. **Correspondence.** All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ: If to the US EPA:
Director Associate Director

WVDEP Office of Air Enforcement and Compliance Assistance

Division of Air Quality (3AP20)

601 57th Street U.S. Environmental Protection Agency

Charleston, WV 25304-2345 Region III 1650 Arch Street

DAQ Compliance and Enforcement¹: Philadelphia, PA 19103-2029

DEPAirQualityReports@wv.gov

¹For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status Reports, Initial Notifications, etc.

3.5.4. **Operating Fee**

3.5.4.1. In accordance with 45CSR30 – Operating Permit Program, the permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made

3.5.5. **Emission inventory.** At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.

4.1. Limitations and Standards

- 4.1.1. The limitations set forth in this condition are hereby established to ensure that the permittee operates and maintains the glycol dehydration unit (affected source) with associated control device(s) that limit hazardous air pollutant emissions to below the major source threshold value of HAPs as defined in 40 CFR §63.761 (Subpart HH National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities) as follows:
 - a. The maximum amount of wet natural gas processed through the dehydration unit shall not exceed 7.5 MMscf per day. Compliance with this limit shall be determined using a 12-month rolling total.
 - b. The effluent generated by the flash tank of the dehydration unit shall be routed through a closed vent system to the control device identified as DEHY1 at all times while the dehydration unit is in operation.
 - c. The effluent generated by the still vent shall be routed through a closed vent system to the control device (DEHY1) at all times while the dehydration unit is in operation.
 - d. The control device (DEHY1) shall be operated and maintained in accordance with Condition 4.1.2.
 - e. The re-boiler shall be operated and maintained in accordance with Condition 4.1.3.
 - f. The closed vent system as required in this condition shall meet the following:
 - i. The system shall be constructed of hard piping
 - The system shall be constructed and maintained free of leaks. A leaking component is defined as a measured instrument reading greater than 500 ppm above background or by visual inspection.
 - iii. Detected leaks shall be repaired as soon as practicable with the first attempt at repair within 5 calendar days after detecting the leak. Repair shall be completed no later than 15 calendar days after the leak is detected.

[45 CSR §13-5.11.]

- 4.1.2. The permittee shall operate and maintain the control device (DEHY1) for the dehydration unit in accordance with the following emission limitations and operating parameters.
 - a. Emissions of VOC from DEHY1 shall not exceed 1.64 pounds per hour. Annual VOC emissions from the DEHY1 shall not exceed 7.17 tons per year.
 - b. Total hazardous air pollutants (HAPs), which include BTEX, from the flare shall not exceed 0.22 pounds per hour. Annual HAP emissions from the DEHY1 shall not exceed 0.98 tons per year.
 - c. Compliance determination with the emission limits in items a & b of this condition shall be made by using GYCALCTM 3.0 or higher.

- d. Particulate matter emissions from the flare shall not exceed 0.01 pounds per hour. Compliance with this limit is satisfied by complying with requirements of Condition 4.1.2.f. [45 CSR §6-4.3.]
- e. The effluent routed to DEHY1 shall not contain hydrogen sulfide greater than 50 grains per 100 cubic feet of gas. Compliance with this limit is satisfied by limiting the hydrogen sulfide (H₂S) loading of the incoming natural gas to the facility to no greater than 10 grains of H₂S per 100 cubic feet of natural gas.

[45 CSR §10-5.1.]

- f. The permittee shall operate and maintain DEHY1 in a manner to minimize emissions. Such operation of the control device shall constitute the following:
 - i. DEHY1 shall not exhibit any visible emissions, expect for periods not to exceed a total of 5 minutes during two consecutive hours.

[45 CSR §6-4.3.]

- ii. The pilot flame for DEHY1 shall be lit at all times when the dehydration unit is operating. The fuel source for the pilot light shall be either natural gas, flash tank off gas, or a combination of the two fuels.
- iii. The actual flowrate of effluent to DEHY1shall not exceed 35 standard cubic feet per minute, which is the maximum flowrate rated by the manufacturer. Compliance with this limit is satisfied by using the predicted flowrates from the GLYCALC results.
- g. The flare shall be constructed, operated, and maintained to achieve, at the minimum, 95% destruction efficiency for VOCs and volatile HAPs.
- 4.1.3. The permittee shall operate and maintain the reboiler (RBR02) for the dehydration unit in accordance with the following emission limitations and operating parameters.
 - a. Visible emissions from the emission point RBR02 shall not exceed 10% opacity on a 6-minute block average. Compliance with this requirement is satisfied by complying with the fuel type restriction in Condition 4.1.3.b.

[45 CSR §2-3.1]

- b. The reboiler shall only be fueled with natural gas.
- 4.1.4. The permittee shall implement leak detection and repair program for the dehydration unit in wet gas service:
 - a. For pressure relief devices:
 - i. The pressure relief devices for the flash tank and glycol reboiler shall be equipped with at the least a visual indictor that indicates that a pressurized release has occurred.
 - ii. The pressure relief devices for the flash tank and glycol reboiler shall be monitored to determine if the device has completely seated within 5 days after each pressure release to detect leaks.
 - b. The equipment, to include connectors, for the dehydration unit shall be free of defects including, but are not limited to, visible cracks, holes, or gaps in piping; loose connections; liquid leaks; or broken or missing caps or other closure devices. If using Method 21, an instrument reading of 10,000 ppm or greater is classified as a leak.

- c. When a defect or leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after it is detected.
- d. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- e. Sampling connection systems are exempt from the requirements of this condition.
- 4.1.10. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR§13-5.11.]

4.2. Monitoring Requirements

- 4.2.1. The permittee shall monitor and record the following parameters for the purpose of demonstrating compliance with Conditions 4.1.1., 4.1.2., and 4.1.3.:
 - a. The throughput of wet natural gas processed through the dehydration unit on a daily basis, days the dehydration unit operated, and annual natural gas flowrate.
 [40 CFR §63.774(d)(1)]
 - b. Determine actual annual average natural gas throughput (in terms of natural gas flowrate to the glycol dehydration unit per day) by converting the annual natural gas flowrate to a daily average by dividing the annual flowrate by the number of days per year the glycol dehydration unit processed natural gas.

[40 CFR §63.772(b)(1)(i)]

- c. Identify any periods there was no flame present for the pilot of the flare when the dehydration unit was in operation.
- d. Determination of the actual average benzene emissions from the dehydration unit shall be made using the model GRIGLYCalcTM, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalcTM Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled "Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions" (GRI-95/0368.1).

 $[40 \ CFR \ \S 63.772(b)(2)(i) \ \& \ 63.774(d)(1)(ii)]$

- e. Records of such monitoring shall be maintained in accordance with Condition 3.4.1.
- 4.2.2. For the purpose of demonstrating compliance with Condition 4.1.2.e., the permittee shall conduct gas sampling at a point that is representative of the incoming natural gas to the facility and analyzing the sample to determine the hydrogen sulfide content of the sample. At a minimum, such sampling and analysis shall be conducted once per calendar year. Records of such monitoring shall be maintained in accordance with Condition 3.4.1. of this permit.

[45 CSR §10-8.3.a.]

4.2.3. For the purpose of demonstrating proper operation of the flare, the permittee shall conduct a visible emission observation using Section 11 of Method 22 for one hour once every calendar

quarter in which the dehydration unit operates. If during the first 30 minutes of the observation there were no visible emissions observed, the permittee may stop the observation.

If at the end of the observation and visible emission were observed for more than 2.5 minutes, then the permittee shall follow manufacturer's repair instructions, if available or best combustion engineering practice as outline in the unit inspection and maintenance plan. To return the flare to compliant operation, the permittee shall repeat the visible emission observation. Records of such monitoring and repair activities shall be maintained in accordance with Condition 3.4.1.

- 4.2.4. For the purposes of demonstrating compliance with the requirements of the closed vent system in Condition 4.1.1., the permittee shall conduct the following:
 - a. Conduct an initial visual, olfactory, and auditory inspection for defects that could result in air emissions within 180 days of start-up. Defects include, but are not limited to, visible cracks, holes, or gaps in piping; loose connections; liquid leaks; or broken or missing caps or other closure devices.
 - b. After the initial, subsequent annual visual, olfactory, and auditory inspections shall be conducted for defect that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in piping; loose connections; liquid leaks; or broken or missing caps or other closure devices.
 - c. Detected leaks shall be repaired in accordance timing stated in Condition 4.1.1f.iii.
 - d. Records of such inspections shall be maintained in accordance with 3.4.1.
 - e. The use of the procedures listed as Alternative Methods to Method 21 (i.e. soapy water) to determine a leak or a leak has been repaired is acceptable.
- 4.2.5. The permittee shall monitor the dehydration unit for equipment leaks in accordance with the following requirements:
 - a. Conduct an initial visual, olfactory, and auditory inspection for defects that could result in air emissions within 180 days of start-up of the dehydration unit.
 - b. After the completion of the initial inspection, subsequent inspections shall be conducted in accordance with the following:
 - i. Visual inspection of the glycol circulating pumps for visual indicators of leaking seals once per month.
 - ii. Visual determination of the visual indictor of the pressure relief device to determine if a release has occurred on a daily basis.
 - iii. Conduct a visual, olfactory, and auditory inspection for defects that could result in air emissions within 12 months of the previous inspection of the dehydration unit.
 - c. Detected leaks shall be repaired in accordance timing stated in Condition 4.1.4.
 - Records of such inspections and any repaired made shall be maintained in accordance with 3.4.1.
 - e. The use of the procedures listed as Alternative Methods to Method 21 (i.e. soapy water) to determine a leak or a leak has been repaired is acceptable.

4.3.1. For the purposes of demonstrating proper operation of the flare, the permittee shall conduct an initial performance test within 180 days after initial startup of the flare. Permittee shall conduct a Method 22 of Appendix A to Part 60 to determine if the flare is operating within compliance of Condition 4.1.2.f.i. The observation period for this demonstration is 2 hours. During the observation, the dehydration unit shall be operated at 90 percent of the unit's design capacity or the maximum anticipated rate. Such demonstration shall be conducted in accordance with the applicable portions of Condition 3.3.1. Records of such demonstration shall be maintained in accordance with Condition 3.4.1.

4.4. Recordkeeping Requirements

- 4.4.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:
 - a. The date, place as defined in this permit, and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of the analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.
- 4.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
- 4.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:
 - a. The equipment involved.
 - b. Steps taken to minimize emissions during the event.
 - c. The duration of the event.
 - d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

4.4.4. The permittee shall maintain records of the analysis that is used to indicate compliance is in accordance with items a., b. and f.iii. of Conditions 4.1.2. Such records shall include the source of data used in the analysis and be maintained in accordance with Condition 3.4.1.

[40 CFR 63.774(d)(2)(ii)]

4.5. Reporting Requirements

4.5.1. The permittee shall report to the Director any leaks of the closed vent system that were not repaired in accordance with Condition 4.1.1. Such report shall be included with the facility's semiannual or annual compliance report as required in 45 CSR 30.

5.0. Source-Specific Requirements for Compressor Engines and associated compressors of EN04 and EN05

5.1. Limitations and Standards

- 5.1.1. The following conditions and requirements are specific to the internal combustion engine identified as EN04:
 - a. Emissions from each engine shall not exceed the following:
 - i. NO_x emissions from the engine shall not exceed 1.0 g/hp-hr or 70 ppmvd at 15 percent O_2 . The mass rate of NO_x emissions from the engine shall not exceed 5.20 tpy.
 - ii. CO emissions from the engine shall not exceed 2.0 g/hp-hr or 230 ppmvd at 15 percent O₂. The mass rate of CO emissions from the engine shall not exceed 10.5 tpy.
 - iii. VOC emissions from the engine shall not exceed 0.7 g/hp-hr or 51 ppmvd at 15 percent O₂. Formaldehyde is excluded from this VOC limit. The mass rate of VOC emissions from the engine shall not exceed 3.70 tpy.
 - [40 CFR §60.4333(e) & Table 1 to Subpart JJJJ of Part 60—NOx, CO, and VOC Emission Standards for Stationary Non-Emergency SI Engines ≥100 HP (Except Gasoline and Rich Burn LPG), Stationary SI Landfill/Digester Gas Engines, and Stationary Emergency Engines >25 HP]
 - iv. Formaldehyde emissions from each engine shall not exceed 0.10 pounds per hour and 0.40 tpy.
 - b. The engine shall be equipped with an oxidation catalyst air pollution control device. The oxidation catalyst shall be installed, maintained, and operated as outlined in Condition 5.1.4.
 - c. The engine shall be equipped with an air to fuel (AFR) controller. The AFR controller must be maintained and operated appropriately to ensure proper operation of the engine and control device to minimize emissions at all times.

[40 CFR §60.4243(g)]

- d. The permittee shall record the operating hours of the engine through a non-resettable hour meter.
- e. The permittee shall replace the rod packing in the compressor once every 26,000 hours of operation or once every 3 years.

[40 CFR §60.5385a(a)(1) or (2)]

- 5.1.2. The following conditions and requirements are specific to the internal combustion engine identified as EN05:
 - a. Emissions from the engine shall not exceed the following:
 - i. NO_x emissions from the engine shall not exceed 1.0 g/hp-hr or 69 ppmvd at 15 percent O_2 . The mass rate of NO_x emissions from the engine shall not exceed 3.40 tpy.
 - ii. CO emissions from engine shall not exceed 2.0 g/hp-hr or 228 ppmvd at 15 percent O_2 . The mass rate of CO emissions shall not exceed 6.70 tpy

- iii. VOC emissions from the engine shall not exceed 0.7 g/hp-hr or 51 ppmvd at 15 percent O₂. Formaldehyde is excluded from this VOC limit. The mass rate of VOC emissions shall not exceed 2.40 tpv.
 - [40 CFR §60.4333(e) & Table 1 to Subpart JJJJ of Part 60—NOx, CO, and VOC Emission Standards for Stationary Non-Emergency SI Engines ≥100 HP (Except Gasoline and Rich Burn LPG), Stationary SI Landfill/Digester Gas Engines, and **Stationary Emergency Engines >25 HP**]
- iv. Formaldehyde emissions from each engine shall not exceed 0.06 pounds per hour and 0.30
- b. The engine shall be equipped with an oxidation catalyst air pollution control device. The oxidation catalyst shall be installed, maintained, and operated as outlined in Condition 5.1.4.
- The engine shall be equipped with an air to fuel ratio (AFR) controller. The AFR controller must be maintained and operated appropriately to ensure proper operation of the engine and control device to minimize emissions at all times.
- d. The permittee shall record the operating hours of the engine through a non-resettable hour meter.
- The permittee shall replace the rod packing in the compressor once every 26,000 hours of operation or once every 3 years.

[40 CFR §60.5385a(a)(1) or (2), §60.5415a(c)(3)]

The permittee shall only operate these engines using fuel gas (processed natural gas), except 5.1.3. during emergency operation at which the permittee may operate them using propane for a maximum of 100 hours per year.

[40CFR§60.4243(e)]

- Requirements of the Oxidization Catalysts for EN04 and EN05. 5.1.4.
 - a. The permittee may operate the engine without the catalyst element for the first 200 operating hours of the engine (engine burn-in period). After completing the engine burn-in period or the first 200 operating hours (whichever occurs first), the permittee shall insert the catalyst element and maintain and operate in accordance with the following requirements.
 - The temperature of the exhaust entering the catalyst must be at least 450°F and no greater than 900°F or within the operating range indicated by the manufacturer.
 - c. The pressure drop across the catalyst shall be no greater than 2 inch above the measured pressure drop across at initial start-up with the engine operating at 100% load (+ 10%) or as otherwise specified by the catalyst manufacturer. Load calculations may be performed using engine manufacturers software or other means acceptable to the Director.
 - d. The permittee shall monitor the temperature to the inlet of the catalyst and in accordance with manufacturer's specifications; a high temperature alarm shall shut off the engine before thermal deactivation of the catalyst occurs. If the engine shuts off due to high temperature, the registrant shall also check for thermal deactivation of the catalyst before normal operations are resumed.
 - With the exception of the initial burn-in period as stated in Condition 5.1.4.a., the permittee shall not cause or allow engine exhaust gases to bypass any catalytic reduction device.

Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the 5.1.5. extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR§13-5.11.]

5.2. Monitoring Requirements

5.2.1. The permittee shall measure and record the catalyst inlet temperature and pressure drop across the catalyst for each engine (EN04 and EN05) at least once per month. During such measurements, the permittee shall collect engine operating data to determine the operating load of the engine concurrently. Such records shall be maintained in accordance with Condition 3.4.1.

5.3. Testing Requirements

The permittee must conduct initial performance testing on engines EN04 within 180 days after 5.3.1. initial start-up and thereafter every 8,760 hours of engine operation or once every three years, whichever comes first, to demonstrate compliance with the emission limits of items a.i through a.iv. of Conditions 5.1.1. During such testing, the engine shall be operated at 90% of maximum load or greater and measure and record the catalyst inlet temperature and pressure drop across the catalyst for each test run. Such testing shall be conducted in accordance with the applicable procedures in 40 CFR §60.4244 and Condition 3.3.1. Records of such testing shall be maintained in accordance with Condition 3.4.1.

[40CFR§§60.4243(b)(2)(ii)]

The permittee must conduct initial performance testing on engines EN05 within 180 days after 5.3.2. initial start-up of engine operation to demonstrate compliance with the emission limits of items a.i through a.iv. of Conditions 5.1.2. During such testing, the engine shall be operated at 90% of maximum load or greater and measure and record the catalyst inlet temperature and pressure drop across the catalyst for each test run. Such testing shall be conducted in accordance with the applicable procedures in 40 CFR §60.4244 and Condition 3.3.1. Records of such testing shall be maintained in accordance with Condition 3.4.1.

[40CFR§§60.4243(b)(2)(i)]

5.4. **Recordkeeping Requirements**

- 5.4.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:
 - The date, place as defined in this permit, and time of sampling or measurements;
 - The date(s) analyses were performed;
 - The company or entity that performed the analyses;
 - The analytical techniques or methods used;
 - The results of the analyses; and
 - The operating conditions existing at the time of sampling or measurement.

- Record of Maintenance of Air Pollution Control Equipment. For all pollution control 5.4.2. equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
- 5.4.3. Record of Malfunctions of Air Pollution Control Equipment. For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:
 - The equipment involved.
 - Steps taken to minimize emissions during the event.
 - The duration of the event.
 - The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- The cause of the malfunction.
- Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.
- 5.4.4. The permittee shall keep a maintenance plan and records of conducted maintenance for each engine (EN04 and EN05) and corresponding control device (oxidation catalyst).

[40 CFR §60.4243(b)(2)(ii)]

5.4.5. The permittee shall keep records of engine operating hours for each engine (EN04 and EN05) when using propane.

[40 CFR §60.4243(e)]

5.4.6. For demonstrating compliance with item e of Conditions 5.1.1. and 5.1.2., the permittee shall keep records of the cumulative number of hours of operation or number of months since initial startup of the compressors associated with Engine EN04 and EN05 and thereafter the number of hours operation or number of months since replacement of the reciprocating compressor rod packing. In addition, the permittee shall record of the date and time of each reciprocating compressor rod packing replacement.

[40 CFR 60.5420(c)(3)]

5.5. **Reporting Requirements**

- 5.5.1. The permittee shall submit an initial notification to the Director and Administrator within 15 days after initial start-up of engine EN04 in accordance with Condition 3.4.1. and 40 CFR 60.7(c). Such notification shall contain the following information:
 - Name and address of the owner or operator;
 - b. The address of the affected source;

- c. Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
- d. Emission control equipment; and
- e. Fuel used.

[40 CFR 60.4245(c)]

- 5.5.2. The permittee shall submit an initial and subsequent annual compliance reports to the Director and the Administrator for satisfying the reporting requirements of Subpart OOOOa to Part 60. The reporting period is defined as one year (12 months) after the initial startup of the associated compressors for Engine EN04 and EN05. These reports shall be submitted within 90 days at the end of the reporting period. Such reports shall be submitted in accordance with Condition 3.5.1. and records of such submittal shall be maintained in accordance with Condition 3.4.1. At the minimum, these reports shall contain the following information:
 - a. Permittee Name, Facility Name, addresses of the Facility;
 - b. An indemnification of each affected facility being included in the report;
 - c. Beginning and ending dates of the reporting period.
 - d. A certification by a certifying official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
 - e. The cumulative number of hours of operation or the number of months since initial startup or since the previous reciprocating compressor rod packing replacement, whichever is later.
 - f. Records of deviations specified in Conditions 5.1.1.g or 5.1.2.g. (40 CFR §60.5420a(c)(3)(iii)) that occurred during the reporting period.

[40 CFR §60.5415a; §§60.5420a(b), (b)(1)(i) through (iv), (b)(4)]

6.0. Source-Specific Requirements for the Emergency Generator

6.1. Limitations and Standards

- 6.1.1. The emergency generator, identified as AUX06, is subject to the following requirements:
 - a. The unit shall be a Generac Model QT080 80 kilowatt (kW), 128 horsepower (hp) 4-stroke lean-burn natural gas-fired engine and shall not operate in excess of 500 hours per year based on a rolling twelve-month total.
 - b. The maximum emissions from the Auxiliary Generator shall not exceed the limits given in the following table:

Table 6.1.1. Emergency Generator Emission Limits			
Pollutant	PPH	TPY	
СО	20.57	5.14	
NOx	1.14	0.29	
VOC	0.39	0.10	

- c. Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 [to Subpart JJJJ] for their stationary SI ICE.

 [40 CFR §60.4233(e)]
- d. The emergency generator shall meet the definition of "Emergency stationary internal combustion engine" as given under 40 CFR §60.4248.
 [40 CFR §60.4248]

6.2. Monitoring Requirements

6.2.1. For the purposes of demonstrating compliance with the maximum usage limits set forth in 6.1.1.a., the permittee shall maintain monthly and rolling twelve month records of the hours of operation of the emergency generator.

6.3. Recordkeeping Requirements

- 6.3.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:
 - a. The date, place as defined in this permit, and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of the analyses; and

- f. The operating conditions existing at the time of sampling or measurement.
- If you are an owner or operator of a stationary SI internal combustion engine and must comply 6.3.2. with the emission standards specified in 40 CFR §60.4233(d) or (e), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) and (2) of this section. [40 CFR §60.4243(b)]
 - Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified in paragraph (a) of this section.

[40 CFR §60.4243(1)]

6.3.3. The permittee shall comply with all applicable monitoring, compliance demonstration and recordkeeping requirements as given under 40 CFR 60, Subpart JJJJ. Such records shall be maintained in accordance with Condition 3.4.1.

CERTIFICATION OF DATA ACCURACY

	I, the undersigned, hereby cert	tify that, based	on information and	l belief formed after reasonable
inquiry, all info	ormation contained in the attack	ned		, representing the
period beginning		and ending		, and any supporting
documents appea	nded hereto, is true, accurate, and	l complete.		
Signature ¹ (please use blue ink)	Responsible Official or Authorized Representative			Date
Name & Title (please print or type)	Name		Title	
Telephone No.			Fax No	

- This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:
 - a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
 - (i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), or
 - (ii) the delegation of authority to such representative is approved in advance by the Director;
 - b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
 - c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of U.S. EPA); or
 - d. The designated representative delegated with such authority and approved in advance by the Director.